



July 7, 2016

VIA ELECTRONIC DELIVERY

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: ET Docket No. 13-49 - *Revision of Part 15 of the Commission's Rules to Permit
Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band*

To the Commission:

Pursuant to Sections 1.415 and 1.419 of the Commission's Rules (47 C.F.R. §§ 1.415 and 1.419), the OmniAir Consortium, Inc. ("OmniAir") hereby provides its comments in response to the Commission's *Public Notice* requesting that interested parties "refresh the record" in the above-captioned proceeding.¹

OmniAir unequivocally opposes any sharing of the 5.850-5.925 GHz Band (5.9 GHz Band) between Dedicated Short Range Communications ("DSRC") and Unlicensed National Information Infrastructure ("U-NII") devices. There is no doubt that DSRC applications for Vehicle-to-Vehicle ("V2V") and Vehicle-to-Infrastructure ("V2I") wireless communications promise unprecedented and transformative safety benefits for the traveling public. DSRC is poised for near-term deployment and will literally save tens of thousands of lives every year. OmniAir urges the Commission not to lose sight of this fact. Surely, saving lives qualifies as the "highest and best

¹ See *Public Notice*, "The Commission Seeks to Update and Refresh the Record in the 'Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band' Proceeding," ET Docket No. 13-49, FCC 16-68 (rel. June 1, 2016) ("*Public Notice*").

use” of spectrum resources. Accordingly, OmniAir is opposed to both the Cisco and Qualcomm proposed sharing proposals for U-NII operations in the 5.9 GHz Band.

By way of background, OmniAir, established in 2004, is a nonprofit, industry membership association created to promote the development and deployment of Intelligent Transportation Systems (“ITS”) communications technologies and services through independent, unbiased, and centralized performance certification of ITS radios, software, firmware and transactions to ensure their interoperability, reliability and utility for service providers and the traveling public. OmniAir counts among its members and partners many of the key stakeholders representing both public and commercial interests in the ITS ecosystem: toll, bridge and port authorities; device manufacturers; chipset makers; system integrators; transportation infrastructure developers; testing and certification labs; communications network developers; and research and academic organizations. Its non-member partners include the US Department of Transportation (“DOT”); the International Bridge, Tunnel and Turnpike Association (“IBTTA”); the Connected Vehicle Trade Association and the Institute of Electrical & Electronics Engineers (“IEEE”).

OmniAir has a direct interest in this proceeding and has previously submitted comments² and met³ with key Commission staff in support of DSRC. OmniAir is developing certification testing protocols to be accredited by the International Standards Organization (“ISO”) for DSRC radio devices operating in the 5.9 GHz Band. These certification testing protocols encompass key technical standards for DSRC-based vehicle-to-vehicle (“V2V”), vehicle-to-infrastructure (“V2I”) and vehicle-to-everything (“V2X”) wireless communications:

- IEEE 802.11p - Wireless Access in Vehicular Environments (Wave)⁴ protocol stack
- IEEE 1609 - Higher layer standard based on IEEE 802.11p
- SAE J2735 - Dedicated Short Range Communications (DSRC) Message Set Dictionary
- SAE J2945 - Dedicated Short Range Communications (DSRC) Common Performance Requirements

² OmniAir Consortium, *Comments*, Docket No. 13-49 (May 28, 2013) (“*OmniAir Comments*”).

³ OmniAir Consortium, *Notice of Ex Parte Meeting*, Docket No. 13-49 (April 9, 2014) (“*OmniAir Ex Parte*”).

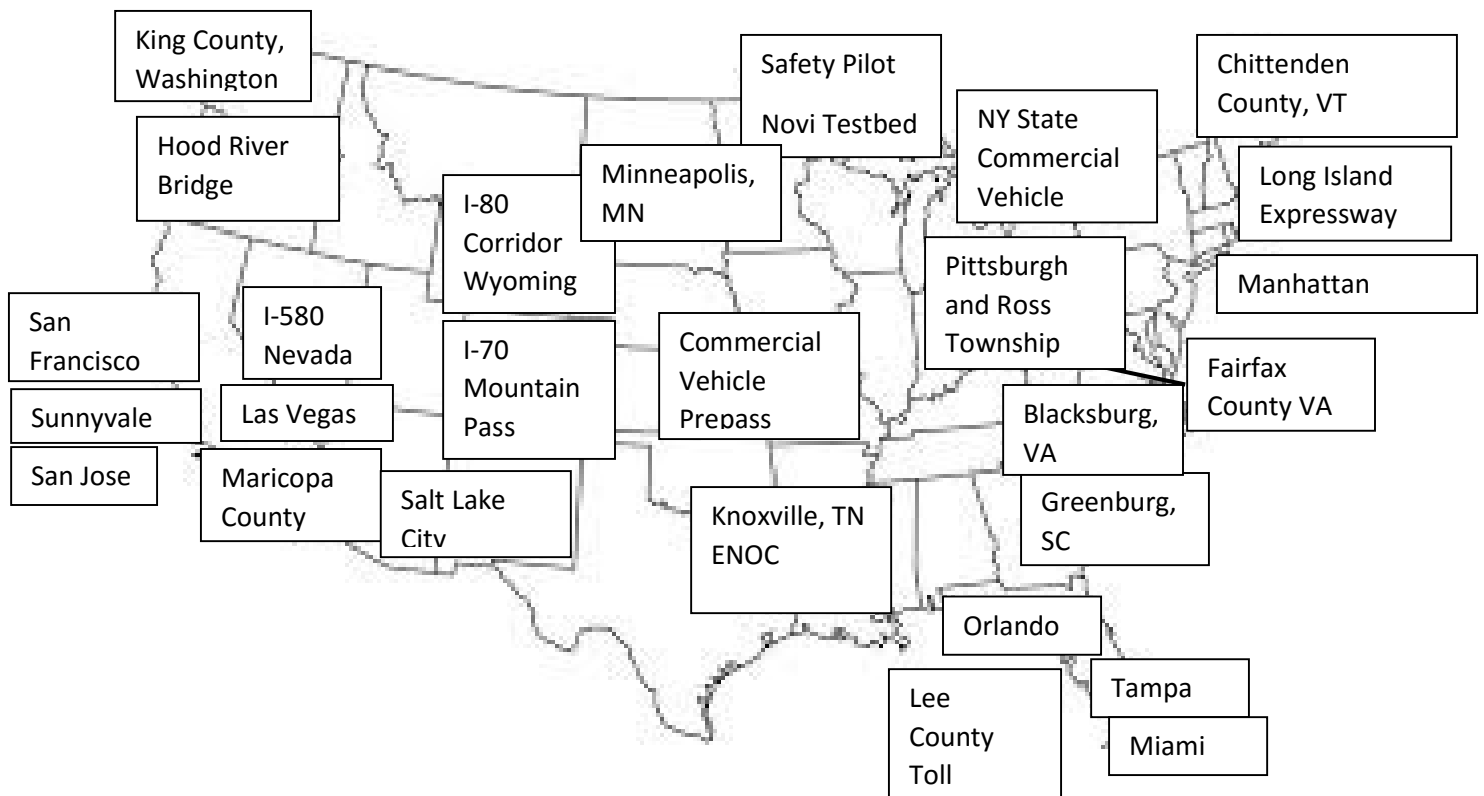
⁴ IEEE 802.11p/WAVE is the successor interoperability standard to the Commission-adopted standard in the DSRC Rules: American Society for Testing and Materials (ASTM) E2213-03, Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems – 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications published September 2003 (ASTM E2213-03 DSRC Standard). See, e.g., 47 C.F.R. § 90.379.

To date, OmniAir has entered into multiple support contracts with US Department of Transportation, toll authorities, vehicle and device manufacturers, and others to conduct certification testing for a variety of DSRC radio devices in support of, for example, the on-going Connected Vehicle Safety Pilot project in Ann Arbor, Michigan, in which more than 3000 vehicles equipped with DSRC radios are being tested in real-world conditions. This past January, OmniAir and the Wi-Fi Alliance announced a Memorandum of Understanding to cooperate on the certification of 5.9 GHz WAVE radio equipment. OmniAir will certify the upper layers of the WAVE protocol stack and Wi-Fi Alliance will certify the Medium Access Control Layer and Physical layers. OmniAir members and partners have invested an estimated \$8 million to support DSRC certification standards development. Overall DSRC industry contributions to certification efforts far exceeds this figure.

More generally, the goal is that purchasers and users of “OmniAir Certified” DSRC radio devices be confident that the devices are interoperable – in other words, that the devices can communicate with one another regardless of manufacturer, location, equipment used or licensee – and that the messages are accurate, reliable and secure. Interoperability between devices is among the key drivers of DSRC deployment.

OmniAir takes this opportunity to supplement its earlier submissions regarding the status of DSRC deployments throughout the United States.⁵ Provided below is a map of locations of current DSRC deployment efforts supporting Connected Vehicle services operating in the 5.9 GHz Band. The locations are spread throughout the country in urban, suburban, and rural settings. They involve deployments on highways, secondary and local roads, as well as at major transportation infrastructures (such as airports).

⁵ See *OmniAir Comments* at 3-10.



In closing, OmniAir reiterates its opposition to any sharing between DSRC and unlicensed operations in the 5.9 GHz Band, including both the Cisco and Qualcomm sharing proposals. OmniAir respectfully requests that the Commission maintain the full 75 MHz allocated to DSRC in the 5.9 GHz Band as currently allocated and not permit any U-NII operations in any portion of the band.

Sincerely,

/s/ Suzanne Murtha

Suzanne Murtha
Executive Director

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